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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,180	12/04/2006	Ronald Waters	UDL-130	2604
36822 7590 11/23/2009 GORDON & JACOBSON, P.C. 60 LONG RIDGE ROAD SUITE 407 STAMFORD, CT 06902				
EXAMINER				
SIMONE, CATHERINE A				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
11/23/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/572,180

Applicant(s)

WATERS ET AL.

Examiner

CATHERINE SIMONE

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 7/14/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 102(b) rejection of claims 1-8 as being anticipated by Vrooman of record in the previous Office Action mailed 3/27/2009, Page 2, Paragraph #2 has been withdrawn due to the Applicant's amendment filed 7/14/2009.
2. The 35 U.S.C. 102(b) rejection of claims 1 and 9-14 as being anticipated by Denndorfer of record in the previous Office Action mailed 3/27/2009, Page 3, Paragraph #3 has been withdrawn due to the Applicant's amendment filed 7/14/2009.

Claim Objections

3. Claim 1 is objected to because of the following informalities: It is believed by the Examiner that the recitation "traverse" in line 3 of claim 1 should be corrected to recite "transverse". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Ramarge et al. (US 2002/0100605).

Regarding claim 1, Ramarge et al. disclose an insulating structure comprising an elongate insulating shank extending in a longitudinal direction (Figs. 4 and 5, shank 255), and at least one insulating shed (Figs. 4 and 5, shed 260) extending transverse [*transverse?*] to the longitudinal direction of the elongate shank, wherein at least a portion of the shank is defined by a first insulating surface, the first insulating surface having a patterned texture defined by an array of substructures such as protuberances (Figs. 4 and 5, protuberances 265), and wherein at least a portion of the at least one shed is defined by a second insulating surface, the second insulating surface having a patterned texture defined by an array of substructures such as protuberances (Figs. 4 and 5, protuberances 265).

Regarding claim 2, Ramarge et al. disclose the shank having a circumference (Figs. 4 and 5, shank 255), and the array of substructures of the first insulating surface being spaced around the circumference of the shank and longitudinally along the shank (Figs. 4 and 5, protuberances 265).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramarge et al. (US 2002/0100605).

Ramarge et al. disclose the claimed insulating structure as shown above.

Ramarge et al. fail to disclose the substructures of the first insulating surface and the second insulating surface having at least one of a spherical, ellipsoidal, paraboloidal, hyperboloidal, conical and symmetric shape.

It would have been an obvious matter of design choice to change the shape of the substructures (protuberances) of the first insulating surface and the second insulating surface in Ramarge et al. to have one of a spherical, ellipsoidal, paraboloidal, hyperboloidal, conical and symmetric shape, since such a modification would have involved a mere change in the shape of the substructures. A change in shape is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04.

8. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramarge et al. (US 2002/0100605).

Ramarge et al. disclose the claimed insulating structure as shown above.

Ramarge et al. fail to disclose the array of substructures of the first insulating surface being arranged such that the surface area of the first insulating surface is substantially constant per unit length along the longitudinal direction of the shank. Ramarge et al. also fail to disclose the array of substructures of the first insulating surface being arranged such that the surface area of the first insulating surface of the insulating structure has a defined variation per unit length along the longitudinal direction of the shank.

It would have been an obvious matter of design choice to modify the array of substructures in Ramarge et al. to be arranged such that the surface area of the first insulating surface is substantially constant per unit length along the longitudinal direction of the shank and be arranged such that the surface area of the first insulating surface of the insulating structure has a defined variation per unit length along the longitudinal direction of the shank, since such a modification would have involved a mere change in the size of the substructures. A change in size is generally recognized as being within the level of ordinary skill in the art. MPEP 2144.04.

Response to Arguments

9. Applicant's arguments with respect to claims 1, 2 and 12-14 have been considered but are moot in view of the new ground of rejection, which is presented above.

Conclusion

10. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CATHERINE SIMONE whose telephone number is (571)272-1501. The examiner can normally be reached on Monday-Friday 9:30-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/
Supervisory Patent Examiner, Art Unit 1794

/CAS/
Catherine A. Simone
Examiner, Art Unit 1794
November 12, 2009